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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,188	12/18/2001	Daniel Spitzer	ACO2843US	3357

7590 08/14/2003

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EXAMINER

MICHENER, JENNIFER KOLB

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,188

Applicant(s)

SPITZER ET AL.

Examiner

Jennifer Kolb Michener

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Search Exchange Pilot Program

1. The USPTO is participating in a search exchange pilot program with the European Patent Office (EPO). As part of the pilot program, the USPTO has received a copy of the Search Report prepared by the EPO on the counterpart EP application for which priority under 35 U.S.C. 119(a) is claimed. The references cited in the EPO Search Report have been considered by the examiner and have been listed on the PTO-892 form. A copy of these references is not being furnished to applicant with the Office Action. It will not be necessary for applicant to submit these references in an information disclosure statement.

Information Disclosure Statement

2. The Information Disclosure Statement (I.D.S.) submitted by Applicant on 9/3/2002 has been considered by Examiner. An initialed copy is attached.

Drawings

3. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. However, no drawing is present. Applicant is required to furnish a drawing under 37 CFR 1.81. No new matter may be introduced in the required drawing.

Specification

4. The use of the trademarks Automatchic, MacBeth Colour-Eye, BYK-Gardner, and X-Rite on page 3 of the specification, has been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Interpretations

5. The phrase "available constituents, e.g., K and S values" in claim 3 has been interpreted broadly to require calculation from any suitable available constituents, with K and S values being merely exemplary.

6. The phrase "several, preferably three or more" in claim 5 has been interpreted broadly to require "several", with the limitations of "three or more" being merely exemplary.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-3, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodrigues (WO 97/43052) in view of Numata et al. (US 6,539,325).

Rodrigues teaches a method for selecting coatings for use in the repair of multi-layer automobile coatings comprising primer and top coats (abstract; p.1, lines 5-10).

Rodrigues teaches providing a bank of colorimetric data for a set of primer formulations and for constituents of primer and topcoat layers (p. 4, lines 6-10 and 23-25).

Rodrigues teaches the use of a "database", as required by the claim, as a database is defined as a "collection of data arranged for ease and speed of retrieval, as by a computer" (American Heritage). Taking into account the formula of the paint on the car that is to be repaired (page 3, line 31) and the colorimetric data (i.e., K & S values) of the constituents of that formula (page 4, line 7), the formula of the primer with similar reflectance as the topcoat can be calculated based on K & S values, as outlined above, in a computer (page 4, lines 20-30). This determination of formulations is done in such a way that the reflectance of the primer and topcoat match, allowing the multi-layer coating to be applied to the object to be repaired using the least amount of coating material, as required by the claim, while still achieving a color match (p. 2, lines 7-15).

While Rodrigues briefly mentions the use of a computer for computing K & S values and he discussed the need to access microfiched data from the manufacturer regarding the formulation of known topcoats, he does not specifically teach inputting this microfiched colorimetric data of the sample to be matched into a computer for access and comparison to the database of constituents.

Therefore, Rodrigues' method is most useful in matching repair coating layers to the colorimetric data of the topcoats as sold from the manufacturer. This method would be

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more useful in repairs occurring just after purchase of the vehicle. But after weathering, a repair operation for a vehicle would require matching a faded color, not the original. Numata et al. do so. Numata teaches a method of color-matching for automotive repairs whereby the actual paint to be matched is measured by using a spectrophotometer which inputs measured colorimetric data into a computer for computation of a color match using a database containing paint component and formulation data (col. 3, lines 55-57). Numata teaches a more complex database and computer system that allow measurement and entry of exact colorimetric data into such a computer, even for weathered coatings (col. 3, lines 5-12). Numata would have reasonably suggested the entry of colorimetric data of the actual object to be repaired in the method of Rodrigues. It would have been obvious to one of ordinary skill in the art to use the teachings of Numata in the method of Rodrigues to computerize the entire matching operation so that a more exact match can be made based on the actual, weathered paint color to be matched on the car to be repaired.

Regarding claim 2, Rodrigues teaches selecting from a given set of formulations (page 4, lines 20-30).

Regarding claim 3, Rodrigues teaches the use of K & S values to determine the formulation, as outlined above.

Regarding claim 5, Numata teaches measuring the color of the object to be repaired from several angles and comparing to the database of angle-dependent colorimetric data for existing components of formulations (col. 6, lines 5, 33-40).

Regarding claim 7, while Numata teaches that the use of K&S values are satisfactory (col. 5, lines 5-30), the use of L*, a*, b* parameters improves the accuracy of the matching operations (col. 5, lines 33 and 44). L*, a*, b* are parameters of the CIE Lab system.

11. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodrigues in view of Numata as applied to claims 1-3, 5, and 7 above, and further in view of Applicant's instant specification.

Rodrigues and Numata teach that which is disclosed above.

While Rodrigues teaches matching the reflectance of the primer to the topcoat and thus the object to be repaired, he fails to teach matching the *color* of the primer to the object to be repaired. However, Applicant's specification teaches that it is known to use colored primers that match the color of the object to be repaired so that a reduced amount of top coat is needed in the multi-layer coating operation (page 1).

Therefore, Applicant's admitted state of the prior art would have suggested the use of a primer that matches the topcoat and the object to be prepared, not only in reflectance but in color as well, to further allow the reduction of topcoat amounts, as desired by Rodrigues, needed to provide adequate color and hiding of the multi-layer coating in the

method of Rodrigues in view of Numata. It would have been obvious to one of ordinary skill in the art to use the teachings of Applicant's disclosure in the method of Rodrigues in view of Numata as a means to further reduce the amount of topcoat needed for matching and hiding power.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

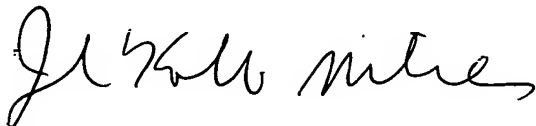
Kettler et al. teaches the use of a spectrophotometer at various angles for use in matching paint colors. Wyman et al., Graf, and Cheetam et al. teach methods of matching paint colors, but are not directed to multi-layer coatings or repairs. Kudo and Jaffe teach the use of colored primers.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jennifer Kolb Michener whose telephone number is 703-306-5462. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on 703-308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in cursive script, appearing to read "J Kolb Michener".

Jennifer Kolb Michener
Patent Examiner
Technology Center 1700
August 9, 2003